ROSS
SYNERGY100
EFFECTS CONTROL
MATTES
SYSTEM CONTROL
MSK1
KEY1
030
AUTO
EFFECTS KEYERS
DOWNSTREAM KEYER
TRANSITION CONTROL
The New Reference Standard in compact digital production switchers

The New Reference Standard is Here!

The Ross Synergy 100 is *the new standard* in compact digital production switchers.

Designed with a big switcher processing engine, the power, capabilities and picture quality are unprecedented in any switcher, by any other manufacturer on the planet.

Live Production!

If there is one thing we know at Ross, it's how to build a switcher for Live Production. You'll find the control panel fast and easy to operate.

Editing!

The Synergy 100 will fit right into your small edit suite. It works well in linear, offline, or hybrid edit suites.

The stylish S100 panel comes in a choice of colors

Sport Yellow

Tech Silver

Classic Black

Breathtaking video quality and super-smooth motion.
The Synergy 100. Looks great, works great.

Effects

Effects

Don't let the small panel fool you...

The Synergy 100 is bursting with powerful effects and features that will enhance your production.

Dual Box Interview

The classic dual box interview, with border and DSK Title. The Synergy 100 makes it easy with one keystroke to create a box, then grab the joystick and rotate it in 3 dimensions, choose a border frame look and it's done! Once the effect is created it is easily stored in one of the 100 effect memories for quick recall later. No other small switcher can match this capability.

Combinations of Elements

You'll be amazed at the ease with which you can combine effects on the Synergy 100 to produce a unique look.

Sophisticated 3D Transitions

DVE transitions work ***just like a wipe!*** Simply select DVE as the transition type and select an effect using the wipe pattern buttons. (Pre-built DVE effects are assigned to these buttons - 100 available).

ROSS

Switchers, Keyers, & Terminal Gear

The S100 is a powerful, versatile, easy to use switcher which makes it the perfect choice for so many applications... *Come and get it!*

Sport Yellow

Tech Silver

Classic Black

Effects Control
- Quickly select wipe or DVE transitions.
- When memory is selected, acts as a memory recall shot box.
- Memory locations work like “Key Frames” for dynamic “Squeeze & Tease” DVE control.
- Panel buttons illuminate in green when linked to this area.

Mattes Select
- Used to delegate matte adjustments to one of 5 internal matte generators.

Menu Button
- Displays S100 system menu on preview monitor.

System Control
- Use back, and to navigate S100 system menu when menu is turned on.

High Quality 3 Axis Joystick
- Used to control SQUEEZE & TEASE 2D or 3D DVEs.
- Also used to position wipes, mask keys, and more!

Effects Keyers
- Control over Key 1 & Key 2.
- All key types are supported.
- Add optional Squeeze & Tease 2D or 3D DVE effects.

Fly Key Button
- Pressing “Fly Key” turns on Squeeze & Tease 3D to create a box or fly a chroma key, self key, or auto select key.
- You won’t find this on other switchers.

Chroma Key
- Autochroma key set-up is available on both the standard and Ultimatte™ chroma keyers.

Key Bus
- 6 full buses for V + K selection to key 1, key 2, and DSK.
- 3 way control shown by backlit indicator.
- Selected source button lights red when on air.

Program Bus
- Source button lights red to indicate source on air.
- Fully assignable (any of the 16 inputs to any button).
- Shift function provides access to “back-side” sources.

Preset Bus
- Used to select the next background.
- Only on air during a transition.

Disk Drive
Standard PC Format 1.44MB Floppy Drive
- Store and recall memories, personality settings, and installation settings.
- Upgrade software and (FPGA) hardware through this drive via software downloaded from the Ross website.

Next Transition Style Operation
- Easy-to-use, with full preview.

Non-Sync Indication
- Bus row labels change to yellow in the case of a non-synchronous or untimed source.

Dissolve, Wipe, and DVE (Squeeze & Tease) Transitions
- Squeeze & Tease transitions are easy...***Just like a wipe!***

Patented Transition Preview
- Hold down DISS, WIPE, DVE while initiating a transition, to verify transition on preview output.

Rate Select
- When operating, individual adjustments to auto transition, downstream keyer, and fade-to-black rates are made here.

Downstream Keyer Adjustments
- Comprehensive DSK control.
- Access to every switcher source via key bus.

Optional Key Border Generator
- Add drop shadows, glows, and more.
- Positionable anywhere on screen.

Key Memory for Auto Select
- Brings back correct key settings automatically for any auto select key.

Character Generator Quick Select Buttons
- Quick select for commonly keyed sources.
- Assign any commonly used key source here.
- Provides quick access to character generators and other common DSK sources.

Legendary Ross Fader Handle
- Simply the best - Backed with a lifetime warranty.

Preset Black
- Quickly sets up a transition through black.

Transition Limit
- Used to establish a mid-transition stop point.
- Great for squeeze-backs

Downstream Fade-To-Black
- With ridges to prevent accidental activation.
- Flashes red when in FTB mode.

Downstream Keyer Transitions
- Dedicated DSK CUT and DISSOLVE buttons.
- Red on air indicator.

Pop-Up Help
- Help messages automatically appear on the preview monitor if you hit an invalid button sequence.

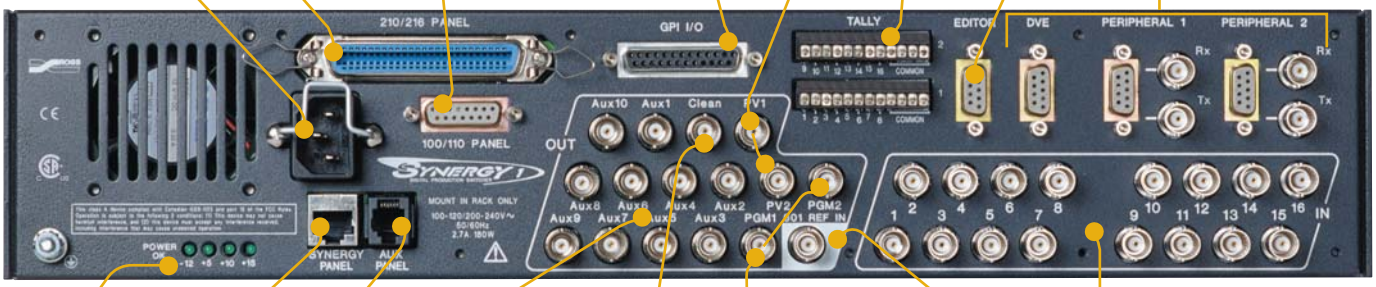
Transition “Zinger”
- Bright green LED shows location and direction of fader handle or auto transition.

Features

Features

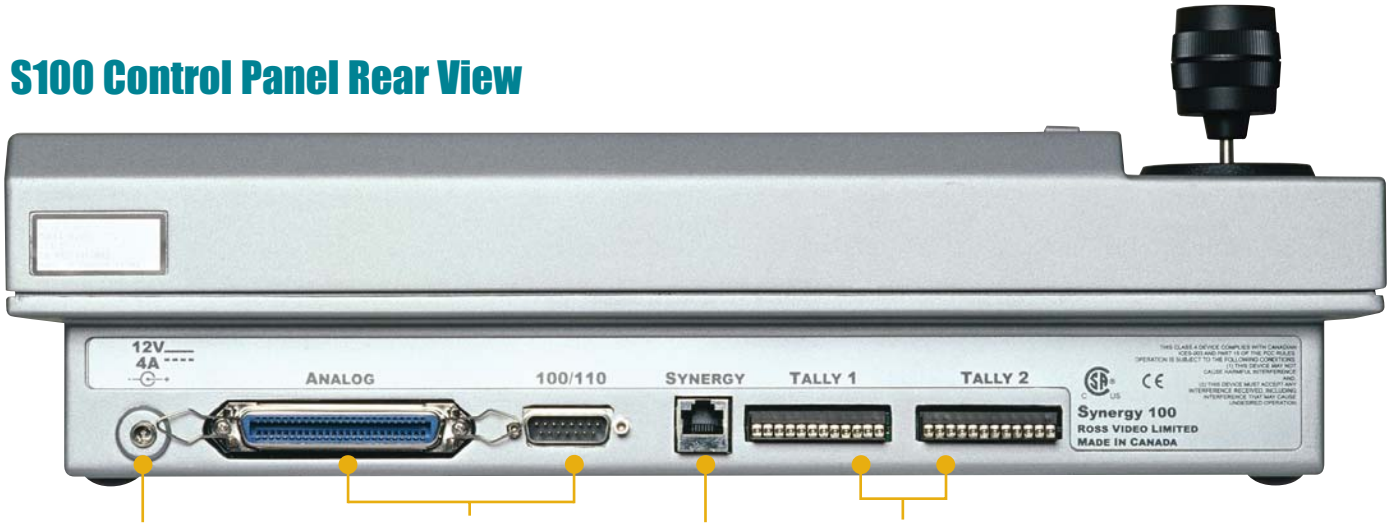
S100-001 (Synergy 1) Rack Frame Rear View

- Analog control panel connectors (used with analog upgrades only)
- Captive locking power cord
- General purpose interface (GPI) for simple editor control and remote memory recall
- GVG 100/110 control panel (Used for GVG digital upgrade)
- Preview outputs (x2)
- Rack frame tallies (optional)
- RS-422/232 serial editor interface (GVG-100/110 or GVG-4000 protocol, optional)
- Unused on S100 (Synergy 1 only)



- S100 control panel communication
- 8 auxiliary bus outputs (Aux busses 1 & 2 not used on S100)
- Program outputs (x2)
- 16 digital inputs
- Power diagnostic LEDs
- Aux panel communication
- Positionable clean feed (optional)
- Digital reference input

S100 Control Panel Rear View



- Locking power connection
- Unused
- S100 rack frame communication
- Tallies (standard)

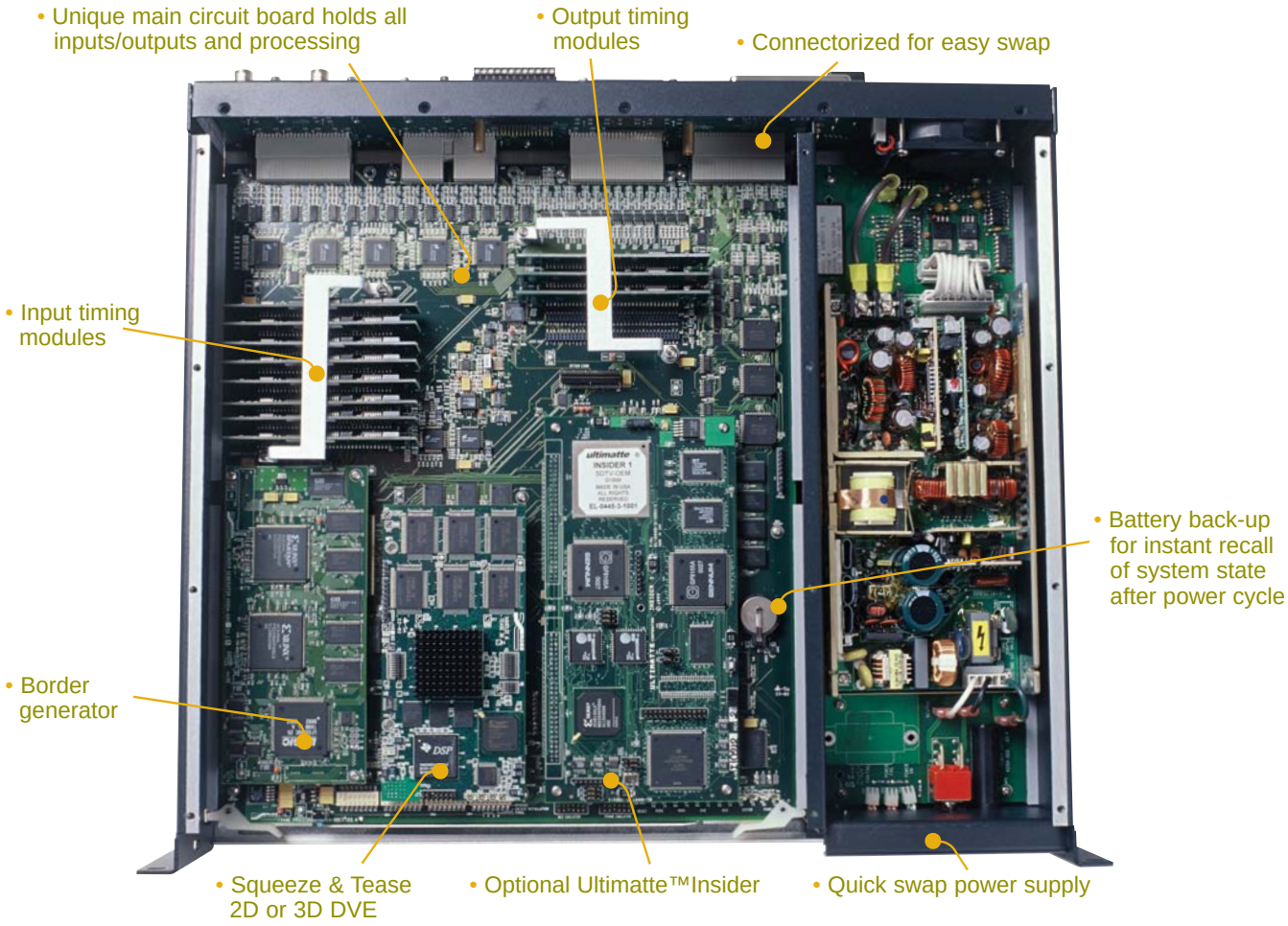
S100 Assignable Aux Bus Control Panel

S100 Single Aux Bus Control Panel

- Camera CCU joystick override is supported on Aux Bus Control Panels.
- Aux control panels can be daisy-chained up to 8 deep.

ROSS

S100 Rack Unit Frame Electronics


• Unique main circuit board holds all inputs/outputs and processing
• Output timing modules
• Connectorized for easy swap
• Input timing modules
• Battery back-up for instant recall of system state after power cycle
• Border generator
• Squeeze & Tease 2D or 3D DVE
• Optional Ultimatte™Insider
• Quick swap power supply

S100 Rack Shelf Unit

- Sturdy construction and smooth operation make this sliding rack shelf the right choice for many applications, including: smaller live production or editing suites and mobile trucks, where the control panel can be easily accessed or stored with the flip of a lever.
- 2 position locking mechanism allows the shelf to be secured in either a stowed or in-use position.

Systems & Options

Systems

S100-001BK	Synergy 100 Digital Production Switcher, Classic Black
S100-001SL	Synergy 100 Digital Production Switcher, Tech Silver
S100-001YL	Synergy 100 Digital Production Switcher, Sport Yellow

System Options

S100-023A	Conversion Frame (DFR-8110A, Includes One Power Supply)
S100-023A-C	Conversion Frame, As Above with Cooling Fan Unit in Door
S100-028	Ultimatte™ Insider Matting Device
S100-031	Clean Feed
S100-140	Squeeze & Tease 2D
S100-142	Squeeze & Tease 3D
S100-141	DSK Border Generator
S100-052	Dedicated Remote Aux Panel (Includes 10 Meter Control Cable)
S100-053	Assignable Remote Aux Panel (Includes 10 Meter Control Cable)
S100-054	Custom Cable for Aux Panel (Per Meter, Replaces 10 Meter Cable)
S100-060	Editor Interface
S100-073	Spare Parts Kit
S100-075	Custom Cable for Main Control Panel (Per Meter, Replaces 10 Meter Cable)
S100-076	Spare Power Supply (Panel)
S100-077	Spare Power Supply (Rack Frame)
S100-079	Rack Frame Tallies
S100-008	In-Desk Mounting Bracket
S100-009	Rackmount Sliding Shelf
S100-081	Additional Operators Manual
S100-082	Additional Installation Manual
S100-083	Additional Maintenance Manual
S100-090	Synergy On-site Operational Training - 1st Day
S100-091	Synergy On-site Operational Training - Additional Day
S100-092	Synergy On-site Technical Training (2 Days)
S100-093	Synergy On-site Commissioning (2 Days)
S100-999	Synergy 100 Extended Warranty (Adds One Year)

Frames for a Buck!

Purchase a Synergy 100 and Conversion Gear and get a Ross 2RU Digital DA Frame and Power Supply for $1

- Call Ross Video for details. (613) 652-4886

Ross Video Technical Services

- *A complete range of technical services is available from Ross Video to ensure that your Synergy 100 installation is a success.*

• Operational Training • Commissioning • Technical Training • Extended Warranties • Technical Support

- Operational Training is available either at Ross or on-site at your location. Experienced Ross operators will teach your staff to get the most out of your new switcher.
- Commissioning is a service to help get your switcher configured and up and running. It is performed by factory trained Ross technical staff.
- Technical training can be provided at the Ross Video factory in Iroquois, Ontario or on-site at your location. Technical training will teach your engineering staff the technical details of the system you have purchased. Signal flow, system configuration and routine maintenance procedures are some of the topics covered.
- The Synergy 100 comes equipped with a 3 year comprehensive warranty. Extended warranties are available for an annual fee.
- Technical advice is available free for the life of your switcher simply by telephone, fax or email to Ross Video.

- Ross, Ross Video, Synergy, and Squeeze & Tease are trademarks of Ross Video Limited.
- Ultimatte is a trademark of Ultimatte Corporation.
- GVG is a trademark of Thomson Multimedia.

www.rossvideo.com

ROSS
Switchers, Keyers, & Terminal Gear

Ross Video Limited
P.O. Box 220, 8 John Street
Iroquois, Ontario, Canada K0E 1K0
Tel: (613) 652-4886
Fax: (613) 652-4425
E-mail: solutions@rossvideo.com